

# LESSON: Letter to the Editor

**Summary:** Students use an online database to find, or are provided with, an editorial addressing a current science issue. Then they write a letter to the editor in response to the editorial.

**Lesson Type:** Extension—This lesson extends a topic in the *EHP Student Edition* article.

**EHP Article:** "EHPnet: CHE Fertility Online Abstracts Library"  
*EHP Student Edition*, February 2007, p. A639  
<http://www.ehponline.org/docs/2006/114-11/forum.html#ehpn>

**Objectives:** By the end of this lesson, students should be able to

1. classify and analyze editorials on current science issues; and
2. write a letter in response to an editorial.

**Class Time:** 45–60 minutes (90 minutes if students find their own editorials in class)

**Grade Level:** 9–12

**Subjects Addressed:** Environmental Sciences, General Science, Language Arts, Social Studies

## ► Prepping the Lesson (20 minutes)

### INSTRUCTIONS:

1. Download the entire February 2007 *EHP Student Edition*, or download just the article "EHPnet: CHE Fertility Online Abstracts Library" at <http://www.ehponline.org/docs/2006/114-11/forum.html#ehpn>.
2. Review the Background Information, Instructions, and Student Instructions.
3. Read the article "EHPnet: CHE Fertility Online Abstracts Library."
4. Review the Abstract Library and editorial located at <http://www.EnvironmentalHealthNews.org/>. Select "Archives," then "Editorials." Some links to editorials may no longer work because the editorial has been moved to an archive part of the website or requires password access. If you search on the archive part of the website, you may still find the editorial.
5. Decide how you want the students to obtain their editorial.  
Option 1: Have students go to the Environmental Health News website archives, where they select and print an editorial of interest. You may want to limit the editorials to certain topics or leave it open to students' interests. Locating and printing editorials can be done as homework or done in class if Internet and computer access is available.  
Option 2: Find and print editorials of your choice in advance of conducting the lesson in class. Make enough copies of the editorial(s) for the students. You may have all students write a letter in response to the same editorial, or you may provide as many different editorials as you feel you can manage.
6. Decide if you want to students to work in groups or as individuals in finding editorials and writing their letters to the editors.
7. Make copies of the *EHP Student Edition* article, Student Instructions, and editorials, as necessary.

### MATERIALS (per student):

- 1 copy of *EHP Student Edition*, February 2007, or 1 copy of the article "EHPnet: CHE Fertility Online Abstracts Library"
- 1 copy of an editorial if the editorial is to be provided in class rather than obtained online by students
- 1 copy of the Student Instructions

### VOCABULARY:

- abstracts
- chronologically
- fertility



**National Institute of  
Environmental Health Sciences**

Community Outreach & Education Program

**BACKGROUND INFORMATION:**

Sufficient background is supplied in the article and Student Instructions.

**RESOURCES:**

*Environmental Health Perspectives*, Environews by Topic page, <http://ehp.niehs.nih.gov/>. Choose Research Issues and Initiatives

Environmental Health News archives of articles, <http://www.environmentalhealthnews.org/archives.jsp>

---

**► Implementing the Lesson**

---

**INSTRUCTIONS:**

1. Ask students if they know what an editorial is and if they have ever read one. Tell students they are going to write a letter to the editor in response to an editorial published in a newspaper or other publication involving a current issue in science.
2. Divide students into groups (if conducting the lesson in group) and pass out the Student Instructions and a copy of the *EHP Student Edition* article "EHPnet: CHE Fertility Online Abstracts Library." Instruct the students on how to obtain the editorial, or provide students copies of editorial(s) you have pre-selected. Have students complete the activity.
3. Have students report back their answers to the questions in Step 3 about their editorial and perhaps read their letter to the editor from Step 4.
4. Lead a class discussion about the contents and positions taken by the editorials and the letters to the editor.

**NOTES & HELPFUL HINTS:**

1. The entire lesson could be done as homework.
2. Alternative lessons can also be developed using the Environmental Health News archives. Besides editorials, the website lists news stories, opinion pieces, organization reports, and scientific studies. Students can be asked to identify an article of interest from one of these article types and provide a short summary to the class.
3. Students could review the different materials available on the website, then identify and differentiate between news stories, opinion pieces, organization reports, and scientific studies based upon their own reading of different articles. You could also gather different types of articles on the same topic for students to read and evaluate how each approaches the same topic.

---

**► Aligning with Standards**

---

**SKILLS USED OR DEVELOPED:**

- Classification
- Communication (note-taking—oral, written)
- Comprehension (listening, reading)
- Critical thinking and response

**SPECIFIC CONTENT ADDRESSED:**

- Environmental health
- Editorials
- Letters to the editor
- Web/news resources

**NATIONAL SCIENCE EDUCATION STANDARDS MET:****Science Content Standards****Unifying Concepts and Processes Standard**

- Systems, order, and organization
- Evidence, models, and explanation
- Change, constancy, and measurement

**Science as Inquiry Standard**

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry



**Science in Personal and Social Perspectives Standard**

- Personal and community health
- Natural resources
- Environmental quality
- Natural and human-induced hazards
- Science and technology in local, national, and global challenges

**History and Nature of Science Standard**

- Nature of scientific knowledge
- Historical perspectives

---

**► Assessing the Lesson**

---

**Step 3:** Editorials are short opinion articles in newspapers or other publications that deal with a current issue affecting the readers of the publication. They generally take on one of four forms: 1) argument and persuasion; 2) information and interpretation; 3) tribute, appreciation, or commendation; or 4) entertainment. Well-written editorials are balanced, factual, organized, and precise, and normally present a solution to a problem. However, some editorials can be based upon emotions and limited or biased use of facts.

Using the editorial you printed from Step 2 or the one provided by your teacher, answer the following questions:

- a. What is the title and author, if known, of the editorial?

Student responses will vary with the editorial. The following sample responses are based on the editorial titled "Developmental Origins of Health and Disease," written by Matthew W. Gillman, MD.

- b. In what publication did the editorial appear? Provide the web address.

The editorial was published in the *New England Journal of Medicine* and can be found online at <http://content.nejm.org/cgi/content/full/353/17/1848>.

- c. What is the publication date of the editorial?

October 27, 2005.

- d. What is the form of the editorial? (Choose from 1) argument and persuasion; 2) information and interpretation; 3) tribute, appreciation, or commendation; or 4) entertainment.)

The editorial takes the form of 1) argument and persuasion.

- e. What is the issue raised by the editorial?

Environmental exposures to fetuses (e.g., through maternal diet, stress, or toxicant exposure) and infants can influence the child's risk of chronic disease (e.g., diabetes, asthma, heart disease, and cancer) later in life.

- f. What supporting facts are included in the editorial related to the issue being raised?

Numerous research studies were listed for both animals and humans that showed environmental influences to fetuses and the very young that lead to significant adverse health impacts in adulthood.

- g. What, if any, alternative viewpoints are presented about the issue?

The editorial did not provide alternative viewpoints.

- h. What is the proposed solution or action being recommended to address the issue?

Researchers and policy makers need to identify, quantify, and evaluate strategies to modify prenatal and perinatal determinants of adverse adult health outcomes.



**Step 4:** Write a letter to the editor in response to the editorial. Address the letter “To the Editor.” In your letter, state what editorial you are commenting on, whether you agree or disagree with the editorial’s position, and your reasons why. You may need to do additional research about the topic of the editorial. Limit your response to 300 words or less.

Responses will vary with the editorial. Assess the quality of the letter on the arguments that are provided explaining why the letter authors are for or against the position in the editorial. Letters could also be evaluated for grammar and spelling. A sample response to the above editorial follows:

To the Editor:

I appreciate the editorial by Dr. Matthew Gillman titled “Developmental Origins of Health and Disease” in your October 27, 2005, issue. The significance of environmental factors early in life impacting disease outcomes later in life is becoming more apparent with each new study in this area. Citing 20 studies, Dr. Gillman does an excellent job of outlining the animal and human research supporting various environmental factors that have already been identified, such as diet and maternal smoking. With rates of obesity, asthma, and diabetes rapidly increasing in the general population, understanding and acting on developmental origins of these diseases is critical. I completely support the need for more research in this area.

John Doe  
New Brunswick, NJ

---

### ► Authors and Reviewers

**Authors:** Barry Schlegel and Laura Hemminger, University of Medicine and Dentistry of New Jersey–School of Public Health

**Reviewers:** Stephanie Bishop, Susan Booker, Erin Dooley, Stefani Hines, and Joseph Tart

**Give us your feedback!** Send comments about this lesson to [ehpscienced@niehs.nih.gov](mailto:ehpscienced@niehs.nih.gov).



**Step 1:** Read the article "EHPnet: CHE Fertility Online Abstracts Library."

**Step 2:** If directed by your teacher, go to the Abstract Library located at <http://www.EnvironmentalHealthNews.org/>. Select "Archives" and then "Editorials." Locate and print an editorial on a topic you or your teacher selects. Some links to editorials may no longer work because the editorial has been moved to an archive part of the website or requires password access. If you search on the archive part of the website, you may still find the editorial. If you are unable to immediately locate the editorial you choose, select another.

**Step 3:** Editorials are short opinion articles in newspapers or other publications that deal with a current issue affecting the readers of the publication. They generally take on one of four forms: 1) argument and persuasion; 2) information and interpretation; 3) tribute, appreciation, or commendation; or 4) entertainment. Well-written editorials are balanced, factual, organized, and precise, and normally present a solution to a problem. However, some editorials can be based upon emotions and limited or biased use of facts.

Using the editorial you printed from Step 2 or the one provided by your teacher, answer the following questions:

- a. What is the title and author, if known, of the editorial?
- b. In what publication did the editorial appear? Provide the web address of the editorial.
- c. What is the publication date of the editorial?
- d. What is the form of the editorial? (Choose from 1) argument and persuasion; 2) information and interpretation; 3) tribute, appreciation, or commendation; or 4) entertainment.)
- e. What is the issue raised by the editorial?

f. What supporting facts are included in the editorial related to the issue being raised?

g. What, if any, alternative viewpoints are presented about the issue?

h. What is the proposed solution or action being recommended to address the issue?

**Step 4:** Write a letter to the editor in response to the editorial. Address the letter "To the Editor." In your letter, state what editorial you are commenting on, whether you agree or disagree with the editorial's position, and your reasons why. You may need to do additional research about the topic of the editorial. Limit your response to 300 words or less.

